

AD-A262 001



2

1992
Executive Research Project
F7

DTIC
S ELECTE
MAR 29 1993
C D

US-CIS Cooperation in Disaster Assistance and Response

Gregory B. Hall
U. S. Department of Transportation

Faculty Research Advisor
Dr. Clair K. Blong



The Industrial College of the Armed Forces
National Defense University
Fort McNair, Washington, D.C. 20319-6000

DISTRIBUTION STATEMENT A

Approved for public release
Distribution Unlimited

93-06282



8 26 064

1992
Executive Research Project
F7

US-CIS Cooperation in Disaster Assistance and Response

Gregory B. Hall
U. S. Department of Transportation

Faculty Research Advisor
Dr. Clair K. Blong



The Industrial College of the Armed Forces
National Defense University
Fort McNair, Washington, D.C. 20319-6000

Accession For	
NTIS	<input checked="" type="checkbox"/>
DTIC	<input checked="" type="checkbox"/>
Unannounced	<input checked="" type="checkbox"/>
Justification	
By Rec Form 50	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
A-1	

DISCLAIMER

This research report represents the views of the author and does not necessarily reflect the official opinion of the Industrial College of the Armed Forces, the National Defense University, or the Department of Defense.

This document is the property of the United States Government and is not to be reproduced in whole or in part for distribution outside the federal executive branch without permission of the Director of Research and Publications, Industrial College of the Armed Forces, Fort Lesley J. McNair, Washington, D.C. 20319-6000.

U.S.-C.I.S. COOPERATION IN DISASTER ASSISTANCE AND RESPONSE

INTRODUCTION

The disintegration of the Soviet Union into a dozen new republics has completely changed the way the region operates internally and externally. Not only have domestic institutions and programs collapsed, but international relations and agreements, many of which were recently brought about because of glasnost, are now in limbo or no longer apply.

One such area in question is an agreement between the United States and the former Soviet Union (FSU) calling for the two countries to cooperate both internationally and in each others' territories on natural and manmade disasters. In fact, there is increased concern on the part of the U.S. and other western nations that the FSU will not be able to cope with the next natural or manmade disaster in its own territory or much less take steps to prevent one from happening. The region is unstable and a major disaster could have adverse consequences on the Administration's peace initiatives.

HISTORY OF FSU AND US DISASTER AGREEMENT

In July 1991, prior to the breakup of the Soviet Union, the United States and the former Soviet Union (FSU) signed a Memorandum of Understanding (MOU) on Cooperation in Natural and

Manmade Emergency Prevention and Response.

This agreement paved the way for closer cooperation in disaster preparedness and contingency response between the two countries. Signing of the agreement was the culmination of several months of negotiations between the FSU and the United States and was largely the result of improved political conditions between the two countries beginning in 1985.

The five-page agreement contains 10 articles, which provide for: 1) cooperation in improving techniques and capabilities for emergency response and preparedness, including offers of assistance within each others' territories, to third countries and possible joint responses; 2) establishment of joint workshops or seminars, planning and communication links between the two sides and exchanges of specialists; and 3) arrangement of a joint committee to plan and coordinate cooperative activities.

The agreement does not specify areas for cooperation, such as search and rescue, earthquake response or fire fighting, and there are no mandatory obligations and no timetables agreed upon to organize any of the activities provided for under the agreement (see Appendix for agreement). In essence the agreement would not bind either side to open up sensitive areas of civil defense despite the improvement of relations between the two countries. It should be noted that the Federal Emergency Management Agency (FEMA) did not give its concurrence to the

agreement because of "security concerns."¹

Much has changed in the former Soviet Union since the agreement was signed in 1991. The Soviet Union has broken into 12 republics and three Baltic states and the entire region has been thrown into such a state of disarray that humanitarian assistance is necessary to assure the survival of its population. The U.S. has already provided the region with humanitarian assistance and, at the same time, Congress has appropriated funds to assist in the dismantling of nuclear, chemical, biological and other weapons left over from the Cold War.

Can the U.S. and Commonwealth of Independent States (C.I.S.) benefit from a cooperative working relationship in the areas outlined by the current agreement or has the collapse of the Soviet Union made the agreement obsolete? Is a new one needed? Upon the dissolution of the Soviet Union the United States informed all the newly formed republics that U.S. agreements with the former Soviet Union would be fully binding, with limited exceptions, on the new republics.² This becomes an enormous administrative task for the U.S., since this in effect multiplies the number of bilateral relationships twelve fold. The Department of State is now prioritizing the agreements in terms

¹ LaVelle M. Foley, International Relations Officer, Federal Emergency Management Administration, Washington, D.C., private interview, November 1991.

² Gary Grappo, Desk Officer, Economic Section, Independent States and Commonwealth Affairs, U.S. Department of State, Washington D.C., private interview, February 1992.

of their importance to the United States. ³

The Political Setting for the Agreement

The idea for a cooperative agreement on emergency prevention and response between the U.S. and the former Soviet Union evolved as result of the Gorbachev policy of "glasnost" and later "perestroika" and the general reduction of Cold War tensions between the two countries. Until the accident at Chernobyl, the Soviets went to elaborate lengths to cover up such disasters. One source stated that the initial cover up of Chernobyl helped propel Gorbachev into a "full blown policy of glasnost."⁴

This new approach by the Soviets allowed the two countries to combine their resources in responding to international situations, including the opening of the port of Massawa in Ethiopia and providing relief aid to Angola. This was a radical change from the competitive ideological struggle between communism and capitalism and the Soviet policy of expanding its presence and building influence in the third world during forty years following World War II. On the domestic side, the U.S. became involved in the Armenian earthquake disaster in 1988, having dispatched a team of experts in the immediate aftermath of that incident.

The situation in the former Soviet Union continues to change at a rapid rate, and it is difficult to tell who is in

³ Grappo interview

⁴ Hedrick Smith, The New Russians, (New York, Random House, 1990), p.99.

Chernobyl disaster in an attempt to consolidate the functions of many agencies.⁵ These included the Soviet military, Civil Defense (headed by the Council of Ministers), the Ministry of Health (and its 6 regional centers), Internal Affairs (fire fighting), and the State Committee on Hydrometeorology. According to the Office of Foreign Disaster Assistance (OFDA), all of the key players were victims of the coup.⁶ As of March 1992, the State Committee on Defense, Emergency Situations and Natural Disaster Relief Operations was established as a result of the abolition of the Commission.⁷ (Most of the republics now have similar entities.) Apparently, this included some of the officials from the dissolved Commission. However, the handling of humanitarian aid, which is the first priority even over the successor group to the Commission, was assigned to the State Committee for International and Humanitarian Technical Assistance, a "temporary" organization according to U.S. officials.⁸ This temporary organization has expressed no interest in resurrecting the MOU, when the idea was broached by

⁵ OFDA Trip Report, remarks of Soviet Official, V. Gorchakov, meeting of July 31, 1990, p.2.

⁶ Peter Bradford, Office of Foreign Disaster Assistance, Agency for International Development, U.S. Department of State, Washington, D.C., private interview, November 1991.

⁷ Edward Malayan, Counselor, Embassy of Russia, Washington, D.C., facsimile, March 5, 1992.

⁸ Dayton Maxwell, Deputy Director, OFDA, private interview, April 1992.

U.S. officials during a March 1992 visit to Russia.⁹ This lack of interest could be the result of the organization's preoccupation with immediate humanitarian aid needs, bureaucratic rivalry with the permanent organization, or a lack of expertise in implementing the MOU. It is probably a combination of all of the above. Also, whereas humanitarian aid has a clearly identifiable monetary value and provides immediate results, contingency planning, cooperation in training and other aspects of the MOU do not.

Prior to the coup, Gorbachev and Soviet leaders were less hampered by immediate humanitarian aid needs. They assumed that the center would direct and coordinate disaster assistance matters while delegating certain functions to the republics. The overall function was to be consolidated under the Commission which would be run as a western-style civilian agency. Looking at the record of the initial exploratory discussions between U.S. and Soviet officials on the bilateral agreement, it was clear that the Soviets envisioned a far reaching commitment from the U.S. in both technical expertise and resources. In contrast, the U.S. objective was to develop closer ties with the Soviets as a way to draw the Soviets into a dialogue, to encourage liberalization and to use this as a basis to increase U.S. diplomatic leverage in the U.N.¹⁰ However, the U.S. side did not

⁹ Ibid.

¹⁰ William Garvalink, Assistant Director, Disaster Response Division, OFDA, private interview, November 1991

envision the agreement as a way to make available monetary aid. Apparently, the Soviets tabled an elaborate draft text of an agreement at the first bilateral meeting in 1990 which they wanted the U.S. to sign. Although a copy of the draft is unavailable, the remarks by the Soviet delegation at that first meeting are indicative of Soviet goals:

- cooperate in space and satellites to monitor disasters (exclusively a Soviet military function)
- exchange information and coordinate efforts on disasters
- establish a center for emergency ecological systems, economics and information
- include such areas as forest fires, medical assistance, earthquake prediction (long term) (there are 400 seismic and 300 geodesic centers in the Soviet republics), and increase public awareness
- reduce the consequences of earthquakes and include seismic issues in a bilateral agreement
- exchange scientific personnel and conduct joint research on natural disasters, joint training, joint monitoring and emergency equipment, and cooperation in foreign disasters
- develop an early warning system in the Soviet republics (the Commission would provide the central coordination)

In addition to these areas of specific desires, it was apparent that with the collapse of communism the Soviets would

require additional assistance in developing a new political and economic basis to organize and operate a disaster assistance program. The Soviets posed such questions as: how will assistance be funded; how will relationships be set up between government bodies, such as in the U.S. between Congress and OFDA; how will press relations be handled, particularly when government decision making is criticized; and how will the necessary legal and economic infrastructure be developed?

These questions revealed the extent the problems facing the Soviets in developing democratic institutions to address problems and create programs that had largely been the responsibility of the military and centralized control of civil defense. The process will take time and as one source indicated, it may be ten years before the C.I.S. states have fully developed democratic institutions.¹¹

Western Prescription for Assistance--Operation Provide Hope

The U. S., which has been criticized by some for its slowness to take a leadership role in providing aid to the FSU, hosted a multilateral conference in January 1992 to lay out areas where assistance was needed. A key point that emerged from the 47-nation Coordinating Conference on Assistance to the New Independent States (CCA), called Operation Provide Hope, was that "in the absence of technical assistance, often the new independent states lack the necessary institutions and training

¹¹ Thomas Zamostny, National Intelligence Officer for the C.I.S., Central Intelligence Agency, lecture at the National War College, January 1992.

to sustain and, in some cases, begin reform." 12

Even though the C.I.S. were not invited to attend, the conferees, who were mainly from developed countries of the west, agreed among themselves that technical assistance would be necessary in the short term to raise the efficiency of the C.I.S. states and avert severe shortages of food, medicine, shelter and energy. To increase the efficiency of these efforts, the conferees agreed that such programs should be designed "taking into account how the independent states approach the reform process." 13 So, assistance would be tied to the C.I.S. undertaking reforms.

The immediate effort would be to provide emergency humanitarian aid, mainly food and medicine, to the C.I.S.. The long-term goal was to provide technical assistance to set up programs so that people could help themselves.

Some of the identified problem areas in the C.I.S. can no doubt be attributed to the demise of centralized control that existed under the communist state and the lack of new institutions and programs to fill the void. Other problems are endemic to the society and the decay in the standard of living that ultimately culminated in the downfall of communism. For example, the military handled disaster support operations under the old system. Now the military and its equipment is dispersed

12 U.S. Department of State, Fact Sheet: Operation Provide Hope, January 23, 1992, p.1.

13 Ibid.

among the republics (and in former East Germany) and its role and allegiances are unclear.¹⁴ Many of the nearly three million military personnel are themselves in need of humanitarian assistance, particularly those returning from Poland, Hungary and other former satellite countries.

Medical

The area of medical needs and health care is a deep-rooted problem that has been exacerbated by the current situation. For example, about 67 percent of the former Soviet Union's hospitals do not even have hot water. The entire region suffers from high disease and death rates, especially from infectious diseases. Critical medicines and medical supplies now are much scarcer since the former Soviet Union can no longer depend on the Eastern-bloc countries which used to supply 70-80 percent of its needs.¹⁵

One of the steps that conferees agreed to was "to encourage contingency planning on emergency needs which may be done under UN auspices, other disaster relief agencies, and in close consultation with the food and shelter working groups." ¹⁶

¹⁴ General Yevgeny Stolyarov, Senior Deputy to the Russian Defense Minister, Commonwealth Commander-in-Chief, lecture at the National War College, February 1992.

¹⁵ Murray Feshback, Georgetown University, lecture at the National War College, November 1991.

¹⁶ U.S., Department of State, Medical Assistance Fact Sheet, Coordinating Conference on Assistance to the New Independent States, January 23, 1992, p.2.

Energy

Easing energy shortages was identified by the CCA as crucial to the success of democratic and market reform movements in the new independent states. The production of oil, coal and electricity have decreased significantly in the C.I.S. due to lack of internal investment, dislocations in the equipment supply system, and general economic decline, including strikes in the energy producing sectors. The CCA agreed that fuel shortages could hamper distribution of relief shipments of food and medicine.

Part of the effort to increase available supplies of energy would entail increasing energy output in the region by making existing systems more efficient.

Food

Despite large scale deliveries of donated food, widespread food shortages continue to exist in the region. The CCA has indicated that food donations will continue to be needed. These shortages, which are the most severe in industrial cities and remote areas, have been caused by shortfalls in agricultural production (due to a fragile growing season), distribution failures and hoarding. Improvements in energy resource distribution would be particularly important to the agriculture and the food processing industries to help alleviate domestic food shortages.

AFTER THE WASHINGTON CONFERENCE

During his 1992 visit to the U.S. following the CCA, Russian

leader Boris Yeltsin complained openly that the U.S. and some Western European countries were not doing enough to support his economic reforms. One newspaper account said that the airlift of aid, organized under Project Hope in Washington in January 1992, "seemed both a gesture to provide some substantial relief in an emergency, as well as a publicity maneuver intended to overshadow how slow and relatively limited the overall American aid contribution has been." ¹⁷ Some Russians say the current situation is reminiscent of World War II when they begged the West to open a second front, and all they received was tinned meat.

Today, the Russians want hard currency and technical assistance. There was some sentiment among certain people that the Administration wanted to do more, but in an election year and with a faltering economy a larger program was not politically feasible.

As limited as the program appeared, the U.S. approach was to target humanitarian aid to major cities where the possibility of public unrest would create the most risk to democratic reforms. Russia has been the main focus of U.S. policies. In total, the U.S. level of aid (pledged), as of February 1992, was roughly \$5.75 billion (increasing to \$6.3 billion as of April 1992), including about \$3.75 billion in credits for food (the U.S. contribution to Operation Provide Hope was about \$88 million, evenly divided between food and medical assistance and 11

¹⁷ The New York Times, February 11, 1992, p. A14.

percent to cover costly air shipments).

In comparison, since 1990 the European Community (EC) has offered about \$80 billion in assistance, mostly from Germany (which had pledged considerable aid anyway as payment for German unity). The EC's \$80 billion pledge package is distributed among the following categories:

Export Credits and Guarantees	48.1 %
Technical Assistance	2.3 %
Food and Medical Aid	3.9 %
Balance of Payments Support	10.6 %
Strategic Assistance	13.8 %
Other	7.3%
Other Credits	14.0 %

(Source: N.Y. Times, from European Community Data, Jan. 23, 1992, p.A8.)

Roadblocks To Aid and the Role of NATO

A common roadblock to delivering assistance is the lack of a distribution and transportation network. "This is not unusual," noted a spokesperson for Interaction, an organization representing about 120 private voluntary relief organizations. "In a disaster, logistical systems are usually the first to go."¹⁸ The creation of 12 republics and the lack of centralized control also has created new borders which, in some instances, have become barriers to delivering aid from the West. For

¹⁸ Lisa Mullins, Interaction, Washington, D.C., personal interview, January 1992.

example, Turkey has blocked shipments through its ports if they are destined for Armenia. An alternate route through Georgia is effectively blocked by political turmoil in that republic. So, consequently, air routes are the only access to Armenia.

Following the Washington meeting of the CCA, NATO's Senior Civil Emergency Planning Committee offered to coordinate logistical functions of the assistance program. The initial offer, which the CCA declined, was for military hardware.¹⁹ It was agreed that NATO's role would be limited to coordinating (matching needs and resources) and tracking transportation for the C.I.S. but not the distribution of humanitarian aid within the C.I.S.. The State Department does not regard this as an unusual role for NATO, pointing out that NATO has been involved in political consultations and disarmament negotiations, even though it is not specifically provided for in its charter. NATO's growing non-military involvement in Eastern Europe and the former Soviet Union was enunciated in the London Declaration of July 6, 1990, which stated:

¹⁹ Kurt Vulker, Political Military Officer, European Security and Political Affairs, U.S. Department of State, telephone interview, February 1992.

"We affirm that security and stability do not lie solely in the military dimension, and we intend to enhance the political component of our Alliance ... The Atlantic Community must reach out to the countries of the East which were our adversaries in the Cold War, and extend to them the hand of friendship."²⁰

There is no doubt that many see this new support role as a way to revitalize the faltering NATO alliance.

The Role of Private Voluntary Organizations

The success of humanitarian assistance efforts around the world, including the C.I.S., depend to a large extent on Private Voluntary Organizations (PVOs). These organizations collect information on impending emergencies, the culturally acceptable form of assistance, and the most efficient ways to provide relief within a country. In the U.S. they also play an educational or lobbying role in interacting with U.S. officials in "devising procedures for humanitarian assistance."²¹ Most importantly, they help administer humanitarian assistance and are relied on extensively by the Agency for International Development (AID), the International Committee for the Red Cross (ICRC), the United Nations, and other organizations.

In the U.S., about 120 PVOs are members of an association called Interaction. Approximately 28 PVOs belonging to Interaction are actively involved in the C.I.S.. Their members'

²⁰ North Atlantic Treaty Organization, London Declaration on a Transformed North Atlantic Alliance, Press Communique S-1 (90) 36, Brussels, Belgium, July 6, 1990, pp.1-2.

²¹ David Forsythe, The Moral Nation, edited by Bruce Nichols and Gil Loescher (Indiana: University of Notre Dame Press, 1989) pp.82-83.

involvement in the C.I.S. has been an integral part of the overall humanitarian aid effort.

One of their priorities is to build local institutions and partnership organizations in the C.I.S., where there are no indigenous PVOs. But the task has been difficult. Besides the failure of logistics in the region, PVOs' efforts have been constrained by the lack of a developed market mechanism that allows the PVOs to make certain their constituents' assistance reaches its target. In 1984/85, the PVOs received some adverse publicity when they were accused of "dumping" relief supplies in the Horn of Africa during the famine relief program. Many of the newer, less experienced, ethnically-based PVOs that have sprung up (i.e. Russian Winter Foundation, Lifeline to Russia) have seen their efforts severely hampered by a black market and hoarding.

Several schemes have been suggested to solve this problem-- a British plan calls for food auctions to sell food aid and to use the proceeds to help the needy.²² While some worry that food shortages may disappear before aid reaches its destination, there appears to be agreement that whatever mechanism is adopted is more likely to succeed if it is designed and implemented in the C.I.S. and is not simply a transplanted product of the West.²³ Despite labels of corruption and profiteering, the black market may eventually emerge as the dominant market mechanism.

²² The Economist, January 25, 1992, p.11.

²³ Lisa Mullins, Interaction

**Critical Areas not Addressed by Operation Provide Hope --
Relevancy to the MOU**

We still have an incomplete picture of natural and manmade hazards in the former Soviet Union, but we do know that there is a substantial risk that a natural or manmade disaster could occur during this precarious period as the C.I.S. struggle to adopt democratic institutions. The reform process extends to establishment of the means to respond to and prevent disasters. Although there is considerable technical knowledge and expertise that was present under the old system, it is unclear how the humanitarian struggle has diminished the availability of these skills. Also, there is no longer a mechanism--such as a unified military--to respond to an emergency or much less prevent one from happening.

Nuclear Hazards

In 1986, when the Chernobyl nuclear power plant in the Ukraine spewed clouds of radioactive material into the atmosphere and across the European continent, it took about four days for the Soviets to acknowledge there had been an accident. The Soviets dispatched 40,000 troops to deactivate the reactor structure and handle clean up and evacuations within a 30-kilometer area. Over 100,000 people were moved, but 1.6 million people including 460,000 children still live in the contaminated area as of 1990, according to officials of the former Soviet Union.²⁴ The Soviets have indicated that as many as 8 million people were affected by

²⁴ OFDA, Trip Report, November 1990, p.7.

the accident, not to mention its effects on neighboring countries outside the FSU.

The greatest exposure impact was on the inhabitants of the neighboring republic of Belorus. Commenting on the situation at the November 1990 bilateral meeting, one Ukrainian official stated, "this type of reactor had no right to be used for peaceful purposes. And we have no alternative to nuclear energy. The genie has been let out of the bottle and we cannot put it back in." 25

At this time there does not appear to be a recent independent assessment of radiological conditions at the Chernobyl site or at any of the other 17 nuclear power facilities located throughout the C.I.S., where the outdated Chernobyl-type "graphite" reactor, generally acknowledged to be at least 20 years behind current design technology, is the predominant design. The majority of these plants are located in the Ukraine and the southern region. One such power plant, which was reportedly shut down, is located in Armenia, the site of a major earthquake in 1988. The plant, about 15 kilometers from the city of Yerevan, supplied 40 percent of the power grid.

Although the plant should remain shut down, this is not likely. Armenia, unfortunately, depends on electricity from Azerbaijan which, as a result of the dispute over Nagorno-Karabakh, has limited the flow of electricity to Armenia to three hours per day. Furthermore, a Ukrainian official (Deputy Prime

25 Ibid., p.8.

Minister for Emergencies) commenting during the November 1990 bilateral discussions on the decommissioning of nuclear reactors stated "there is no way to dismantle this type; a Chernobyl-type disposal would expose more workers." ²⁶ Unfortunately, when an accident occurs in the FSU, such as the one at Chernobyl, the tendency has been for officials to find scapegoats, rather than correct the problem.

The Administration is also concerned about the inherent danger associated with elimination of tens of thousands of nuclear weapons. While the Soviets have welcomed outside monetary aid in dismantling these weapons, they have been reluctant to accept technical assistance or provide details of how they would technically approach this enormous task. In mid-February Secretary of State Baker laid out a seven part U.S. proposal to assist in the dismantling of nuclear weapons in the C.I.S., which included nuclear accident response planning.

Chemical Hazards

Some people believe that the disposal of dangerous chemical weapons, which have been described as inherently unstable, poses a far greater problem than the dismantling of thousands of warheads in the former Soviet Union's nuclear arsenal.²⁷ While former Soviet officials may possess good technical

²⁶ Ibid., p.6.

²⁷ Dennis Kwaitkowski, Assistant Associate Director, Office of Technological Hazards, FEMA, personal interview, and James Macris, Director, Office of Chemical Preparedness and Prevention, Environmental Protection Agency, telephone interview, January 1992.

qualifications, they lack the capability and facilities for the safe disposal of dangerous chemicals.²⁸

Officials in the Ukraine warn that their republic alone has 1,260 dangerous chemical plants.²⁹ While there may be sound environmental reasons to close these plants, there are also strong economic pressures to continue to operate them. In Armenia, for example, prior to the 1988 earthquake, a "green" movement, the so-called Karabakh Committee, attempted to stop the destruction of the region's rivers and forests and began by closing dangerous chemical plants. But popular sentiment changed. Many now believe that this move has choked off the economy and so there is increased pressure to reopen two chemical plants, as well as the Chernobyl-type power plant.³⁰

Earthquakes

Earthquake activity in the former Soviet Union follows a path along the southern border from Moldova, through the Ukraine and the smaller southern republics. As in the United States, about 10 percent of the land mass is seismically active. Since the Armenia earthquake, when about 40,000 lives were lost and 300,000 people were left homeless, very little has changed in the

²⁸ Fred Krimgold, Associate Dean for Research and Extension, College of Architecture and Urban Studies, Virginia Polytechnic Institute and State University, Alexandria, Virginia, personal interview, February 1992.

²⁹ OFDA Trip Report, November, 1990, p.5.

³⁰ Krimgold interview

region to improve conditions.³¹ Thousands of people are living in temporary housing and what little reconstruction there is is being done to the same poor standards as before the earthquake.³² Most of the devastation caused by the quake was to structures built during the Brezhnev era when corruption resulted in substandard materials, such as poor concrete, and a lack of adequate quality control techniques which failed to assure, for example, that reinforcing steel was welded to fasten structures.³³ In fact, older buildings were found to have fared better.

Unsafe conditions in Armenia have been compounded by the influx of refugees from Nagorno-Karabakh. Only 15 percent of the homes damaged by the quake in Armenia have been reconstructed and one source indicated that the Red Army engineers attested to the fact that 87 percent of the buildings may be unsafe.³⁴ Ironically, many of these continuing problems in Armenia are the result of the disintegration of the Soviet command system and the rise of nationalism and ethnic hostilities in the region. Prior to the collapse of the Soviet Union it was the general practice to dispatch work crews from all over the Soviet Union to help rebuild areas damaged by disasters. In 1989, Azerbaijan cut off

³¹ Hedrick Smith, The New Russians, p.328.

³² Robert (Greg) Chappell, Assistant Associate Director, Office of Disaster Assistance Programs, FEMA, telephone interview, February 1992.

³³ Fred Krimgold

³⁴ Ibid.

Armenia's access to such assistance, mainly from the Ukraine.³⁵

Lessons from the Armenian Earthquake

As difficult as it may seem, the tragedy in Armenia benefitted the U.S. In 1988, the United States dispatched a Disaster Assistance Response Team (DART) to Armenia about four days after the earthquake struck; this was after some initial confusion as to the Soviet's need or willingness to accept outside assistance.³⁶ In providing assistance in a massive search and rescue effort to extricate earthquake victims from collapsed buildings, DART found that its methods were inadequate.

When the team returned home, one of its members testified before the House Subcommittee on Science, Research and Technology that the Armenian experience demonstrated that the U.S. was not prepared to conduct an effective search and rescue operation if there were to be a major earthquake in the U.S. or internationally.³⁷ As a result, Congress was alerted which led to establishment of 25 urban search and rescue task forces located in fire departments across the U.S. This experience is perhaps the best example of the realization of collateral benefits from being able to assist another country in a disaster.

³⁵ Ibid.

³⁶ William Garvalink, interview

³⁷ U.S. Congress, House, Subcommittee on Science, Research, and Technology of the Committee on Science, Space, and Technology, The Soviet Armenian Earthquake Disaster: Could a Similar Disaster Happen in the U.S.?, Testimony by Fred Krimgold, March 15, 1989, Committee Print, Washington, D.C.: Government Printing Office, 1989.

In a separate incident, OFDA officials also recall how impressed they were with the Soviet response and treatment of burn victims from a train wreck in the former Soviet Union in 1990.

Comparison of U.S./C.I.S. MOU with U.S. Agreements on Cooperation in Emergency Prevention and Response

Mexico

The U.S. has cooperative agreements on emergency prevention and response with two countries--Mexico and Canada. FEMA is the lead U.S. agency under both agreements. The basic differences between these agreements and the agreement with the USSR is sharing of a common border and similar national interests as allies in civil defense matters.

The agreement with Mexico was signed in 1980, superseding a 1968 agreement. Its provisions are similar to the agreement with the USSR except for language referring to common border areas. Recent activity under the agreement has been given a boost from the friendship between presidents Bush and Salinas.³⁸ An initial step in expanding this relationship has been the formation of a committee on geological phenomenon (earthquakes) dealing with the earthquake area between Tiajuana and San Diego. The committee is comprised of local and some regional representatives from the two countries which have developed tentative plans on a cooperative emergency response program. A second area of cooperation is in hurricane and flood response in the Brownsville and Matamora border area. In addition, the U.S.

³⁸ LaVelle Foley, FEMA, telephone interview, January, 1992.

is providing Mexico technical assistance in establishing an emergency communications network linking remote disaster sites with government officials in Mexico City.

The two countries also have sent participants to exercises (terrorism and hazardous materials) in each others' countries; joint exercises are to be held later.

Canada

The current U.S./Canada agreement was signed in 1986, superseding a 1967 agreement on civil emergency planning. The agreement provides for cooperation in common border areas and the possible sharing of facilities and equipment in case of an emergency. The agreement lacks the developmental thrust of the Mexican agreement. U.S. and Canadian border areas also lack the geologic and meteorological problems common to the southern US border. U.S. relations with Canada have tended to focus on national security/civil defense issues and what has become a diminished nuclear threat. There are also approximately 94 agreements between Canadian and U.S. state, local and provincial governments. The agreements cover a wide range of common emergency response interests, including pollution, fire fighting, search and rescue, and traffic control. Under the agreements, the two countries take part in transborder emergency response exercises on a continuing basis.

IMPLEMENTING THE MOU

It is neither possible nor practical to advance the MOU with the C.I.S. along the same lines that the U.S. has done with its

agreements in either Mexico or Canada. The U.S. does not share a common border with the C.I.S., and the C.I.S. has neither the same characteristics as Mexico, a developing country, nor Canada, a developed country and long time U.S. ally. However, there exists considerable expertise in the U.S. at the federal, state and local level, some of which has been gained under our bilateral relationships with Canada and Mexico, that could be could serve as a helpful model for the new republics.

Disaster Assistance and Prevention in the U.S.

Although the U.S. system of disaster prevention, assistance and planning is not perfect, it has been very effective in preventing disasters and minimizing human and property loss when disasters do strike. The 1989 earthquake in California (Loma Prieta) is a good example of how well this system works. Its effectiveness depends, to a large part, on the interaction and cooperation of democratic institutions at the state, local and federal level.

Domestically, FEMA is the central focal point within the federal government on emergency management activities. It has the primary role in coordinating and managing the infrastructure of the U.S. during both peacetime and in war. Some of these activities are carried out as separate programs within FEMA, such as disaster assistance, flood plain management, resource mobilization of the civil sector, and emergency telecommunications and warning. FEMA also has various charters for federal agency coordination and support of state and local

emergency management activities as a result of federal funding. In the U.S. there is recognition that centralization or consolidation of emergency planning activities would lead to monetary savings, cross-fertilization of thinking, flexibility, and efficiency. For example, there is a commonality of technique in various types of emergencies, such as evacuations. It is probably this commonality as it applies to civil defense plans in case of a nuclear attack that the agency did not want to possibly divulge to the Soviets.

The U.S. has been able to tie some of its emergency management programs to mitigation. For example, flood insurance became tied to mitigation through flood plain management, and the purchase of this insurance became a determinant of eligibility for federal disaster insurance.

The scope and depth of FEMA's activities in training, information dissemination, and regulatory issues is indicative of the structure and resources required to implement mitigation programs and develop an effective response capability.

CONCLUSION

It is safe to assume that these capabilities do not exist in the former Soviet Union, but may evolve as democratic reforms are allowed to take hold. As long as humanitarian issues are in the forefront, it will be difficult to get the C.I.S. leadership to focus on prevention and mitigation issues. And experts from the former Soviet Union who were once involved in these areas may be seeking new jobs elsewhere. There is increasing pressure to cut

military expenditures in the C.I.S., which means other methods to develop a disaster response capability will have to be found. Unfortunately, there are no indigenous PVOs in the region and those that have sprung up are more interested in profiteering and political activities.³⁹

Reduction of the former Soviet Union's military power is of course a benefit to U.S. national security. The U.S. is trying to help the C.I.S. to dismantle its nuclear arsenal and nuclear accident response planning is part of the U.S. proposal. Provision of technical expertise for accident response planning is provided for under the MOU. These techniques also apply to nuclear power plants. The U.S. has substantial expertise in this area. FEMA established a Radiological Emergency Preparedness (REP) program, which encompasses "off-site" preparedness activities at the State and local levels, beyond the nuclear power plant site. FEMA is now in a position, now that the threat of a nuclear war between the two countries has subsided, to redirect some of its resources toward providing technical expertise and training to officials from the new republics wishing to study the U.S. as a possible model.

Our border programs and cross-border exercises with Canada and Mexico are good examples for the new republics of the former Soviet Union to study as they will need to establish programs along their own new borders. As an initial step, C.I.S. experts could be invited to observe selected transborder exercises.

³⁹ Dayton Maxwell, OFDA, interview.

Although the immediate problems of the C.I.S. are humanitarian aid, there is concern that ethnic clashes may erupt which will create refugee problems.⁴⁰ It may be possible that the C.I.S. officials would be receptive to an offer of U.S. assistance in this area, particularly if the techniques and capabilities developed also could be applied to other disaster responses such as earthquakes or environmental accidents. There is the opportunity for the U.S. to gain knowledge about its own disaster response and prevention techniques, as in the Armenian earthquake experience. According to one U.S. state official, who indicated that there was interest on the state level for greater contacts with the C.I.S., "the whole region of the FSU is a giant laboratory for this type of work."⁴¹

Finally, the MOU provided for joint cooperation in disaster assistance in third countries. The MOU never envisioned that we would be part of a large scale humanitarian effort directed at the FSU, perhaps "this is part of the East/West healing process."⁴² Our assistance to the C.I.S. at this critical time may better assure cooperation in third countries and for peace in the future.

⁴⁰ Ibid.

⁴¹ Lacy Suiter, Director, Tennessee Emergency Management Agency, telephone interview, April, 1992.

⁴² Julia Taft, former Director, OFDA, telephone interview, March 1992.

MEMORANDUM OF UNDERSTANDING
BETWEEN
THE GOVERNMENT OF THE UNITED STATES OF AMERICA
AND
THE GOVERNMENT OF THE UNION OF SOVIET SOCIALIST REPUBLICS
ON COOPERATION IN
NATURAL AND MAN-MADE EMERGENCY PREVENTION AND RESPONSE

The Government of the United States of America and the
Government of the Union of Soviet Socialist Republics,
(hereinafter referred to as "the Parties"),

Recognizing:

That cooperation in the areas of natural and man-made
emergency prevention and response can promote the well-being
and security of both nations:

The usefulness to the Parties of scientific and technical
information exchanges on natural and man-made emergency
prevention and response;

The need for improved mechanisms of communication and
cooperation between the Parties during times of natural and
man-made emergencies in their two countries;

The importance of consultation and cooperation between the
Parties in responding to natural and man-made emergencies in
other nations; and

The role of the United Nations, other international
organizations, and non-governmental organizations in natural
and man-made emergency prevention and response;

Have agreed as follows:

ARTICLE I

The Parties may cooperate in the following areas of mutual interest:

1. Development of techniques and methods for increasing the Parties' capabilities in the areas of natural and man-made emergency prevention and response; including:
 - monitoring of dangerous environmental, industrial, and natural phenomena;
 - forecasting of natural and man-made emergencies; and
 - assessment of disaster effects and response needs.
2. Establishment of formal mechanisms for timely and direct communication of:
 - information on natural and man-made emergencies occurring on their territories;
 - requests for, and offers of, assistance between the Parties;
 - possible joint responses to natural and man-made emergencies in third countries; and
 - information from relevant international organizations.
3. Involvement of international and non-governmental organizations in the Parties' capabilities for natural and man-made emergency preparedness and response.

Cooperation in the above areas will be based on principles of equality, reciprocity, and mutual benefit and will be aimed at solving common problems and improving the Parties' emergency preparedness and relief operations in cases of natural and man-made disasters.

ARTICLE II

Cooperation under this Memorandum may involve:

- Exchanges of specialists and researchers;
- Exchanges of information and technologies;
- Joint conferences, seminars and workshops;
- Joint planning, development and implementation of research projects and demonstrations;
- Publications, reports, and case studies;
- Creation of communication links between agencies of the Parties; and
- Such other natural and man-made emergency-related activities as may be agreed upon by the Executive Agents named by the Parties pursuant to Article V of this Memorandum.

ARTICLE III

The Parties may encourage, as appropriate, cooperation by government agencies other than those named by the Parties as Executive Agents, and by interested international and non-governmental organizations involved in the areas of natural and man-made emergency prevention and response.

ARTICLE IV

To implement this Memorandum, the Parties will establish a Joint Committee on Cooperation in Natural and Man-made Emergency Prevention and Response (hereinafter referred to as the "Joint Committee"). The Executive Agents will establish procedures for the operation of the Joint Committee and for the duration and conduct of meetings of the Joint Committee. The Joint Committee will meet on a regular basis, at least annually, or more often as agreed upon by the Executive Agents. Meetings of the Joint Committee will be held alternately in the United States and the Soviet Union, unless otherwise agreed by the Executive Agents.

The Joint Committee will plan and coordinate cooperative activities under this Memorandum, review the progress of such activities, and submit an annual report to the Parties on the status of such activities.

ARTICLE V

With a view to coordinating efforts to implement this Memorandum, each Party will designate an Executive Agent. The Executive Agent for the United States of America will be the Office of U.S. Foreign Disaster Assistance of the Agency for International Development. The Executive Agent for the Union of Soviet Socialist Republics will be the State Commission on Emergency Situations of the USSR Cabinet of Ministers.

The Executive Agents will facilitate the conduct of cooperative activities, including organizing and determining the membership of the Joint Committee.

Cooperative action plans or other significant activities agreed upon by the Executive Agents will be included as annexes to this Memorandum, after review by the Parties.

It shall be the responsibility of each Party to notify the other immediately should an Executive Agent cease to have authority to function in that capacity: a Party shall as soon as possible, but no later than sixty (60) days from the date of such notification, advise the other of the identity of the successor Executive Agent.

ARTICLE VI

All activities under this Memorandum, including exchanges of information, exchanges of specialists, and the implementing of cooperative activities, will be conducted in accordance with the national laws and regulations of the Parties, and subject to the funds available to each Party.

The Parties and all organizations participating in activities under this Memorandum will bear costs on the basis of "receiving-side pays," except when otherwise agreed to by

the Parties. Accordingly, under this principle, the Party receiving representatives of the other Party will pay all travel and lodging expenses incurred by the representatives during their visit on the territory of the receiving Party. International travel will be the responsibility of the sending Party.

ARTICLE VII

With respect to cooperative activities under this Memorandum, each Party, in accordance with its national laws and regulations, will:

Facilitate entry into and exit from its territory of qualified participants of the other Party, whether or not they are affiliated with institutions named in this Memorandum, as well as facilitate appropriate access to relevant institutions, organizations, and sources of information.

ARTICLE VIII

Information derived pursuant to activities under this Memorandum, with the exception of information that is not disclosable under the applicable laws and regulations of either Party, will be made available to the world community through customary channels and the normal practices and regulations of the Parties, except when otherwise agreed in writing by the Executive Agents.

ARTICLE IX

This Memorandum will not affect the cooperation of either Party with other States and international organizations.

ARTICLE X

This Memorandum will enter into force upon signature by Parties and will remain in force for five (5) years.

The Parties may agree to extend or amend this Memorandum at any time.

This Memorandum may be terminated by either Party upon six months' written notice to the other Party.

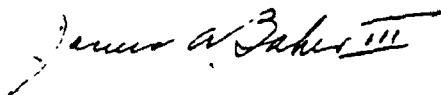
Expiration or termination of this Memorandum will not affect the validity or duration of any activity initiated prior to termination but not completed at the time of expiration or termination.

-8-

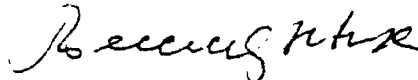
IN WITNESS WHEREOF the undersigned, being duly authorized by their respective Governments, have signed this Memorandum.

DONE at Moscow, in duplicate, this 30th day of July, 1991, in the English and Russian languages, both texts being equally authentic.

FOR THE GOVERNMENT OF THE
UNITED STATES OF AMERICA:

A handwritten signature in dark ink, appearing to read "James A. Baker III".

FOR THE GOVERNMENT OF
THE UNION OF SOVIET
SOCIALIST REPUBLICS:

A handwritten signature in dark ink, appearing to read "Boris Yeltsin".